

Deutsche Rohstoff AG

Germany / Raw materials Frankfurt Bloomberg: DR0 GR ISIN: DE000A0XYG76

Update/H1 Results

RATING PRICE TARGET

BUY €27.00

Return Potential 26.2% Risk Rating High

FIRST 180 WATTENBERG WELLS STILL THE MAIN VALUE DRIVER

DRAG has generated abundant newsflow since our last update on 8 July. Firstly, the company refinanced nearly 70% of the €51.4m of its 2013/18 8% coupon bond outstanding at the end of June through the issue of a new 2016/2021 5.625% coupon bond. Secondly, DRAG's 79.9% owned subsidiary, Cub Creek Energy (CCE), has acquired an additional 1,500 acres in the Wattenberg oil and gas field in Colorado. CCE expects to be able to drill up to 50 horizontal wells on this acreage. These wells will feature two mile lateral sections, whereas the other ca. 180 wells in DRAG's inventory of producing and prospective wells are one mile lateral wells. Thirdly, Almonty, in which DRAG holds a 12.58% stake plus a CAD10m convertible, announced a 78.4% increase in the reserves of its Sangdong tungsten project in South Korea. The updated NI 43-101 technical report on Sangdong published at the end of August indicates that the project could account for over 10% of non-Chinese tungsten output once it starts production. The land acquisition in Colorado is undoubtedly exciting, but many aspects of the tenement's future development still have to be clarified. Drilling permits have to be obtained and given the potential investment volume, partners may have to be found. We also think that further financing will be necessary if DRAG is to pursue this project in parallel with the development of its other Wattenberg projects. For this reason, we are not yet including it in our valuation. The Sangdong tungsten project is also potentially of great value, but the August technical report indicates that the project is not profitable at the current tungsten price. The oil price assumption underlying our model is ca. 5% above the level used in our July study (on a barrel of oil equivalent basis the projected production split is two thirds oil/one third gas). Mainly on this basis, we raise our price target from €24.00 to €27.00. We maintain our Buy ecommendation.

DRAG proceeding with development of tenements in Wattenberg field DRAG continues to develop its oil and gas acreage in the Wattenberg field in Colorado. Through its 79.9%-owned subsidiary, (p.t.o.)

FINANCIAL HISTORY & PROJECTIONS

	2013	2014	2015	2016E	2017E	2018E
Revenue (€m)	17.76	22.87	1.90	13.44	93.94	126.52
Y-o-y growth	473.9%	28.8%	-91.7%	608.5%	599.0%	841.3%
EBIT (€m)	-5.40	88.73	3.36	1.56	58.76	75.65
EBIT margin	-30.4%	387.9%	176.9%	11.6%	62.5%	59.8%
Net income (€m)	-8.31	25.17	1.16	7.28	29.70	38.09
EPS (diluted) (€)	-1.56	4.80	0.23	1.44	5.87	7.52
DPS (€)	0.00	0.50	0.55	0.60	1.00	1.00
FCF (€m)	-35.07	82.10	-12.11	-35.18	-39.89	3.88
Net gearing	54.1%	-63.7%	-40.5%	19.2%	55.7%	40.2%
Liquid assets (€m)	46.06	92.82	71.04	42.51	29.84	12.86

RISKS

Risks include negative movements in the oil price and other raw materials prices, dry well risk, mechanical failure, loss of key personnel.

COMPANY PROFILE

Deutsche Rohstoff AG (DRAG) is a resources company with a portfolio of properties in oil/gas, so-called high tech metals such as tin and tungsten, base metals and rare earths. The business model is based on production in well explored areas in politically stable countries. DRAG is based in Heidelberg, Germany.

MARKET DATA	As of 04 Oct 2016
Closing Price	€ 21.40
Shares outstanding	5.06m
Market Capitalisation	€ 108.32m
52-week Range	€ 12.29 / 21.40
Ava. Volume (12 Months)	4.419

Multiples	2015	2016E	2017E
P/E	93.8	14.9	3.6
EV/Sales	48.2	6.8	1.0
EV/EBIT	18.6	18.4	1.1
Div Yield	2.6%	2.8%	4 7%

STOCK OVERVIEW



COMPANY DATA	As of 30 Jun 2016
Liquid Assets	€ 65.01m
Current Assets	€ 73.34m
Intangible Assets	€ 21.83m
Total Assets	€ 129.15m
Current Liabilities	€ 2.77m
Shareholders' Equity	€ 55.28m

SHAREHOLDERS

Management	9.7%
BASF-VC	6.3%
Free float	84.0%

Cub Creek Energy (CCE), DRAG acquired 2,300 acres in the north eastern part of the Wattenberg field in 2015. The company holds a further 800 acres in the Wattenberg Field through its 93% owned subsidiary, Elster Oil & Gas (Elster). DRAG originally acquired the Elster land in 2013 as part of the Windsor Oil and Gas Project. DRAG sold the Windsor project in mid-2014 - when the oil price was over USD100 - for proceeds of USD220m and a profit before minorities (27.85%) of USD130m. However, the Elster tenements were not sold along with the rest of the Windsor project.

Initial production numbers from wells 6-11 at Elster In October 2015 DRAG announced numbers for the first month of production from the first five horizontal wells drilled at Elster. Daily per well production amounted to 686 BOE (barrels of oil equivalent). Elster completed a further six horizontal wells in mid-June 2016 and published numbers for the first month of production at the end of August. Daily per well production for these wells was 450 BOE. The wells drilled this year all produce from the Niobrara formation whereas four of the five wells drilled in 2015 produce from the Codell formation. Estimated ultimate recovery figures for both formations are similar at 300,000-350,000 BOE per well. Codell wells tend to generate stronger initial production figures but show steeper declines after the first months of production. Management tells us that Codell wells make up about one third of the current producing and prospective well inventory at CCE and Elster. Niobrara wells constitute the balance. Against this background, we think that our assumption of initial average production per well of 500 BOE remains valid.

First 19 CCE wells scheduled to begin production this autumn In June 2016 CCE began drilling 19 wells - of which nine from the Vail drilling pad and ten from the Markham drilling pad. Management tells us that the Vail wells are currently being completed and fracked and are expected to start producing in October. We expect DRAG to publish figures for the first month of production at these wells in mid-November. The Markham wells are expected to begin producing a month after the Vail wells and so initial production results are likely in late December.

Substantial addition to land package announced in August On 10 August DRAG announced that CCE had acquired an additional 1,500 acres in the Wattenberg area. CCE expects to be able to drill up to 50 horizontal wells on this acreage. The wells will feature two mile lateral sections, whereas the other ca. 180 wells in CCE/Elster's producing and prospective well inventory are one mile lateral wells. The capital cost of a two mile lateral well is currently around USD4.3-4.5m compared with ca. USD2.7m for a one mile lateral well. However, lifetime production from a two mile lateral well is usually more than double the equivalent figure for a one mile lateral well. As is the case with its other projects, CCE has again structured the deal not to include any upfront payments to the current owners of the leased acreage. Payments, in the form of royalties, will only be made to the owners once production starts.

Our valuation of CCE and Elster excludes the latest land acquisition The land acquisition in Colorado is undoubtedly exciting, but many aspects of the tenement's future development still have to be clarified. Drilling permits have to be obtained and given the potential investment volume, partners may have to be found. As we discuss later on in this report, we also think that further financing will be necessary if DRAG is to pursue this project in parallel with the development of its other Wattenberg projects. For this reason, we are not yet including it in our valuation. Our current enterprise valuations of CCE and Elster's portfolio of 180 producing and prospective one mile lateral wells (see figure 1 and 2 below) are now €120.5m (previously: €99m) and €23.2m (previously: €14.1m) respectively. Changes to our oil and gas price assumptions (based on the NYMEX futures strip) are shown in figure 3 below.

Figure 1: DCF Valuation of CCE*

USD 000s	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E
Oil production (000 barrels)	384	3,634	5,379	5,892	3,778	2,914	2,427	2,098	1,856	1,670	1,519
Oil price period end (WTI -USD/barrel)	49	49	50	55	56	57	58	59	60	60	60
No. 1 mile-lateral equivalent wells period end	19.0	59.0	100.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
Gross revenue	12,898	131,839	201,407	220,875	144,768	114,673	98,138	86,594	77,417	69,656	63,379
EBITDA	6,712	77,100	102,352	106,596	64,739	49,545	41,197	35,368	30,735	26,816	23,647
Depreciation	-2,202	-20,864	-30,880	-33,825	-21,691	-16,727	-13,931	-12,044	-10,655	-9,587	-8,723
EBIT	4,509	56,236	71,471	72,771	43,048	32,818	27,265	23,324	20,080	17,229	14,924
NOPLAT	2,931	36,553	46,456	47,301	27,981	21,332	17,722	15,161	13,052	11,199	9,701
Tax Rate (%)	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%
Depreciation	2,202	20,864	30,880	33,825	21,691	16,727	13,931	12,044	10,655	9,587	8,723
CAPEX	-46,170	-84,688	-66,420	-32,400	0	0	0	0	0	0	0
Working capital expenditure	-1,371	-12,038	-4,603	-1,028	6,857	2,532	1,391	971	772	653	528
Tax refund	12,627	0	0	0	0	0	0	0	0	0	0
Free cashflow	-29,780	-39,309	6,314	47,698	56,530	40,591	33,045	28,176	24,479	21,439	18,952
PV free cashflow (10% discount rate)	-29,111	-34,933	5,101	35,032	37,743	24,638	18,234	14,134	11,163	8,888	7,143
Sum PV free cashflows	122,542										

Source: DRAG; First Berlin Equity Research estimates

Figure 2: DCF Valuation of Elster Oil and Gas*

USD 000s	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E
Oil production (000 barrels)	637	1,534	2,057	2,904	2,245	1,752	1,437	1,230	1,082	969	878
Oil price period end (WTI -USD/barrel)	49	49	50	55	56	57	58	59	60	60	60
No. 1 mile-lateral equivalent wells period end	11.0	26.0	41.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0
Gross revenue	19,361	54,951	76,490	108,858	86,023	68,959	58,115	50,775	45,125	40,431	36,634
EBITDA	4,421	13,152	17,965	22,351	15,717	10,036	7,371	5,567	4,178	3,025	2,092
Depreciation	-1,455	-3,501	-4,695	-6,628	-5,125	-3,999	-3,280	-2,808	-2,469	-2,213	-2,005
EBIT	2,966	9,651	13,269	15,723	10,592	6,036	4,091	2,759	1,709	812	87
NOPLAT	1,928	6,273	8,625	10,220	6,885	3,924	2,659	1,793	1,111	528	56
Tax Rate (%)	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%
Depreciation	1,455	3,501	4,695	6,628	5,125	3,999	3,280	2,808	2,469	2,213	2,005
CAPEX	-4,568	-11,421	-11,421	-16,751	0	0	0	0	0	0	0
Working capital expenditure	-436	-1,439	-850	-1,301	946	699	444	301	231	192	156
Tax refund	1,371	0									
Free cashflow	-251	-3,086	1,050	-1,204	12,955	8,622	6,383	4,902	3,812	2,933	2,217
PV free cashflow (10% discount rate)	-245	-2,742	848	-884	8,650	5,233	3,522	2,459	1,738	1,216	835
Sum PV free cashflows	21,296										

^{*} our valuation models for CCE and Elster extend to 2034 but for reasons of space we show numbers only out to 2026

Source: DRAG; First Berlin Equity Research estimates

Figure 3: Changes to our oil and gas price assumptions

	to end 2016E	2017E	2018E	2019E	2020E	from 2021E
July assumptions						
WTI oil price (USD/barrel)	47.16	49.00	50.22	51.53	52.50	53.09
Henry Hub gas price (USD/MMBTU)	2.32	3.01	3.04	3.04	3.11	3.44
September assumptions						
WTI oil price (USD/barrel)	48.74	51.51	53.63	54.81	55.94	57.20
Henry Hub gas price (USD/MMBTU)	3.01	3.11	2.92	2.81	2.83	2.93
Oil price ∆ Sept vs. July	3.4%	5.1%	6.8%	6.4%	6.6%	7.7%
Gas price ∆ Sept vs. July	29.7%	3.3%	-3.9%	-7.5%	-8.9%	-14.9%

Source: CME/NYMEX

ALMONTY INDUSTRIES (DRAG'S STAKE: 12.58% PLUS CAD10.0M CONVERTIBLE)

International portfolio of tungsten mining assets Almonty has an international portfolio of tungsten mining assets in South Korea (Sangdong), Spain (Los Santos and Valtreixal), Portugal (Panasqueira) and Australia (Wolfram Camp). All of these assets are 100% owned by Almonty with the exception of Valtreixal, in which Almonty owns 51% and has an option to acquire up to 100%. Los Santos, Panasqueira and Wolfram Camp are currently producing mines, whereas Sangdong and Valtreixal are under development. A decision still has to be taken on whether to complete development of Valtreixal. Almonty expects commercial production to begin at Sangdong in the second half of 2018.

78.4% increase in reserves of largest project... Sangdong is by far the largest of Almonty's projects in terms of reserves. In late July Almonty announced a 78.4% increase in the Sangdong project's reserves to 35,530 tonnes of tungsten trioxide (7.90m tonnes of ore at 0.45% WO₃) from 19,920 tonnes of tungsten trioxide (4.74m tonnes of ore at 0.42% WO₃).

Figure 4: Almonty tungsten reserves pre- and post-Sangdong reserve upgrade

post-Sangdong res	serve upgrade				
Reserves	Ore reserve	Grade	WO₃ reserve	Δ % new vs. old	% WO ₃ reserve
	(tonnes)	(%)	(tonnes)		
Sangdong	7,896,000	0.45%	35,530	78.4%	62.6%
Los Santos	3,582,289	0.23%	8,239	0.0%	14.5%
Wolfram Camp	375,000	0.22%	825	0.0%	1.5%
Panasqueira	1,661,000	0.21%	3,488	0.0%	6.1%
Valtreixal	2,549,000	0.34%	8,667	0.0%	15.3%
Total	16,063,289	0.35%	56,749	37.9%	100.0%
pre-Sangdong rese	erve upgrade				
Reserves	Ore reserve	Grade	WO ₃ reserve		% WO ₃ reserve
	(tonnes)	(%)	(tonnes)		
Sanadona	4 744 000	0.42%	10.020	_	10/10/

0.42% Sangdong 4,744,000 19,920 48.4% Los Santos 3,582,289 0.23% 8.239 20.0% Wolfram Camp 375,000 0.22% 825 2.0% Panasqueira 1,661,000 0.21% 3,488 8.5% Valtreixal 2,549,000 0.34% 8,667 21.1% Total 12,911,289 0.32% 41,139 100.0%

Source: Almonty Industries Inc.

...raises Almonty's total reserves by 37.9% As figure 4 shows, the increase means that Sangdong now accounts for 62.6% of Almonty's reserve base (previously 48.4%) and raises the company's total reserve base by 37.9% to 56,749 tonnes of tungsten trioxide (16.06m tonnes of ore at 0.35% WO₃) from 41,139 tonnes of tungsten trioxide (12.91m tonnes of ore at 0.32% WO₃).

Sangdong to account for 10% of non-Chinese tungsten ouput The updated NI 43-101 technical report on Sangdong published on 29 August projects total production over the mine's 13 year life of ca. 22,650 tonnes of tungsten corresponding to average annual production of ca. 1,740 tonnes. According to United States Geological Survey figures, worldwide tungsten production was 86,800 tonnes in 2014. China accounted for 71,000 tonnes or 82% of this figure. Chinese domestic tungsten demand was 44,000 tonnes in 2014 and has been growing at a CAGR of 10% since 2000. New projects in China are expected to allow for only a small increase in domestic supply and so China is likely to continue reducing exports. Against this background, secure non-Chinese supplies of the metal are becoming increasingly strategically important. The Sangdong project, whose average annual tungsten production is projected to account for ca. 10% of worldwide non-Chinese production, could be a key beneficiary of this trend.

KDB loan has several conditions - including USD20m equity raise Almonty has announced a binding letter of commitment with the Korea Development Bank (KDB) for a term loan of KRW50bn (USD44.9m) to be used for underground mine development and construction of processing plant and infrastructure. The August NI 43-101 technical report puts total mine development costs at USD66m. The company's management expects that a definitive loan agreement will be concluded in due course. According to the management, discussion and analysis report published by Almonty for the nine months ending 30 June, the definitive loan agreement is likely to include conditions under which the loan may be drawn down including the execution of an engineering, procurement and construction (EPC) contract, an offtake agreement and Almonty raising ca. USD21m in equity to cover the balance of the development cost.



Technical report indicates Sangdong is not profitable at current tungsten price The economic analysis in the August NI 43-101 technical report shows an after tax NPV of USD138m for the project using an 8% discount rate. Using the same 10% discount rate which we have used to value DRAG's oil assets (also used by the consultant, Ryder Scott, in its reports on DRAG's oil and gas reserves), we arrive at an NPV of USD115m. However, both these assumptions are based on a tungsten trioxide price of USD370/mtu*. Against the background of falling Chinese tungsten exports this may be a realistic scenario for 2018, but the price is currently below USD200/mtu. Figure 5 below shows our valuation of the Sangdong project under several price and discount rate scenarios. Based on this analysis and using a discount rate of 10%, we estimate that Sangdong will not show a positive NPV at tungsten prices below USD240/mtu. We doubt that Almonty will be able to raise the equity finance required to secure the KDB loan for the Sangdong project at the current tungsten price. Against this background, as in previous studies, we value DRAG's position in Almonty on the basis of Almonty's share price and the nominal value of its convertible. This produces a figure of €9.2m (previously: €9.0m).

Figure 5: Sangdong valuation based on August NI 43-101 technical report base case: (USD370 per MTU WO₃; 8% discount rate)

(USDm)	Yr -2E	Yr -1E	Yr 1E	Yr 2E	Yr 3E	Yr 4E	Yr 5E	Yr 6E	Yr 7E	Yr 8E	Yr 9E	Yr 10E	Yr 11E	Yr 12E	Yr 13E
Recovered MTUs (000s)			187	278	311	280	256	241	217	195	174	204	212	196	117
Revenue	0.0	0.0	53.9	80.3	89.7	80.9	73.9	69.5	62.6	56.1	50.3	59.0	61.1	56.5	33.8
Total opex costs	0.0	0.0	21.7	31.0	31.0	31.0	30.9	30.9	30.9	30.9	31.0	31.0	31.0	31.0	18.2
Total capex costs	30.7	35.0	3.4	2.7	4.2	0.4	0.4	0.4	0.4	0.0	4.5	0.0	0.0	0.0	0.0
Cash flow	-30.7	-35.0	28.7	46.6	54.5	49.5	42.6	38.2	31.3	25.3	14.9	28.0	30.1	25.5	15.6
Tax at 24.25%	0.0	0.0	0.0	0.0	13.2	12.0	10.3	9.2	7.6	6.1	3.6	6.8	7.3	6.2	3.8
Project after tax cash flow	-30.7	-35.0	28.7	46.6	41.3	37.5	32.3	28.9	23.7	19.1	11.3	21.2	22.8	19.4	11.8
PV after tax CFs @ 8% dis	count rate	9	23.7	35.5	29.1	24.5	19.5	16.2	12.3	9.2	5.0	8.7	8.7	6.8	3.9
Post tax total NPV @ 8% d	iscount ra	ate	137.6												

Source: Almonty Industries

rate Discount

Figure 6: Sensitivity of Sangdong valuation in USDm to MTU WO₃ price and discount rates

	Price/MTU WO₃ in USD												
	200	250	300	370	400	450	500						
5.0%	-28	33	94	179	215	276	337						
8.0%	-27	22	70	138	167	215	263						
10.0%	-26	15	57	115	140	182	224						
15.0%	-28	2	32	73	91	120	150						
20.0%	-30	-8	13	43	56	78	99						

Source: First Berlin Equity Research estimates; Almonty Industries Inc.

FINANCIAL POSITION

We assume DRAG will raise additional debt in 2017 In June DRAG announced plans to place up to €75m of a new 5 year 5.625% coupon bond. At the same time, DRAG offered to exchange the new bond for the company's 8% coupon 2013-18 bond at a conversion rate of 104%. The nominal outstanding value of the 8% bond at the time of the start of the offer on 30 June was €51.4m. €19.5m of the 8% bonds were converted and an additional €21.1m was subscribed for the 5.625% bond by the time of the close of the offer on 18 July. An additional €2.1m has been subscribed since the close of the offer. On 19 July, DRAG announced that it would make use of its right to retire 50% of the 8% coupon bond at 103% of nominal value. In our note of 8 July we assumed full conversion of the 8% bond into the 5.625% bond and the take up of the €23.6m balance of the issue by new investors. This was the assumption behind our forecast of €75m in bond debt on the balance sheet at the end of 2016.

^{*}mtu = metric tonne unit = 10kg

The currently outstanding nominal value of the 5.625% bond and the 8% bond are €15.8m and €42.7m respectively - a total of €58.5m. This means that DRAG will have around €16.5m less cash on its balance sheet at the end of this year than we assumed in July. It will also have to repay the outstanding €15.8m of 8% bond debt when this becomes due in 2018. On this basis we model an additional €30m of debt in 2017. This will take net gearing (including the investment securities included in fixed assets) to 56% by the end of 2017. However, on our calculations, net gearing should fall rapidly in the following years (to 40% in 2018 and 12% in 2019) as profits and cash flows generated by the CCE and Elster projects reduce net debt and increase equity.

H1 RESULTS AND P&L FORECAST

Updated 2016 guidance is close to the figure given in the 2015 annual report DRAG's H1/2016 results showed a net loss before minorities of €3.9m (H1/15: a profit of €0.2m). Revenues came in at €1.2m (H1/15: €0m). H1/15 reverues were €0m because DRAG sold the Windsor Oil and Gas Project in mid-2014 and did not restart drilling until H2 last year. H1/16 revenues stemmed from the first five wells drilled at the Elster Project in autumn 2015. Revenues were reduced by a shut-in from the beginning of May for operational reasons. We expect full year 2016 revenues to be double digit €m following the production start of a further six wells at Elster from the end of July and the coming on stream of 19 Cub Creek wells in October and November. Management's guidance for the full year is for net profit before minorities of €8-10m. This is slightly below the guidance of €10m given in the 2015 annual report. The reason is the later than originally scheduled start of the Markham well. DRAG had net liquid assets including investment securities classified as fixed assets of €16.8m at end H1/16 equivalent to net gearing of 27%.

Figure 7 below shows changes to our forecasts in comparison with our previous report of 8 July. 2016 revenues and profit are lower because we now expect the new wells at CCE to begin producing in October and November (previously: September and October). The increase in our forecasts for 2018 and 2019 is a function of the higher oil price assumption mentioned above.

Figure 7: Changes to forecasts

All figures in € 000s	2016E New	2016E Old	Δ	2017E New	2017E Old	Δ	2018E New	2018E Old	Δ
Revenues	13,440	19,086	-29.6%	93,945	86,811	8.2%	126,517	117,576	7.6%
EBITDA	4,975	7,837		80,871	74,415		107,810	99,705	
Depreciation and amortisation	3,417	4,937		22,112	21,659		32,157	32,006	
Operating income (EBIT)	1,558	2,899	-46.3%	58,758	52,755	11.4%	75,653	67,699	11.7%
Net financial result	-5,555	-3,488		-2,977	-2,752		-4,228	-3,391	
Pre-tax income (EBT)	-3,997	-588		55,781	50,004		71,424	64,308	
Income taxes	12,543	10,558		-19,523	-17,501		-24,999	-22,508	
Net before minorities	8,546	9,970		36,258	32,502		46,426	41,800	
Minority interests	-1,268	-1,668		-6,561	-5,880		-8,340	-7,517	
Net income after mins.	7,277	8,301		29,697	28,622		38,086	34,283	
EPS (€)	1.44	1.64	-12.4%	5.87	5.26	11.5%	7.52	6.77	11.1%

Source: First Berlin Equity Research estimates

VALUATION SUMMARY

We see fair value for the DRAG share at €27.0 (previously: €24.0) Figure 8 summarises the changes to our sum of the parts model discussed in the text above. Given that CCE and Elster account for 90% of our enterprise valuation of DRAG we have concentrated on recent developments at these assets in the foregoing text. As figure 8 indicates, we now see fair value for the DRAG share at €27.0 (previously: €24.0).

Figure 8: Sum of the parts model

€m	New	Old
Cub Creek Energy (DRAG's stake 79.9%)	87.7	71.7
Elster Oil and Gas (DRAG's stake: 93%)	18.1	12.3
Almonty (DRAG's stake: 12.58% plus CAD 10.0m in convertibles)	9.2	9.0
Tin International (DRAG's stake: 61.5%)	0.2	0.2
Rhein Petroleum (DRAG's stake: 10%)	2.0	2.0
Ceritech (DRAG's stake: 67.9%)	1.0	1.0
Devonian Metals (DRAG's stake: 47%)	0.0	0.0
Hammer Metals (DRAG's stake: 17.9%)	1.4	1.6
Total enterprise value	119.6	97.8
Cash and financial assets	74.6	83.0
Debt	57.8	57.8
Net cash and financial assets (30.06.2016)	16.8	25.2
Total equity value	136.4	123.0
No shares (m)	5.06	5.06
Equity value per share (€)	27.0	24.3

Source: First Berlin Equity Research estimates



INCOME STATEMENT

All figures in € 000s	2013A	2014A	2015A	2016E	2017E	2018E
Revenues	17,762	22,871	1,897	13,440	93,945	126,517
EBITDA	1,907	114,160	4,933	4,975	80,871	107,810
Depreciation and amortisation	7,302	25,434	1,578	3,417	22,112	32,157
Operating income (EBIT)	-5,395	88,726	3,355	1,558	58,758	75,653
Net financial result	-2,414	-4,065	-3,912	-5,555	-2,977	-4,228
Non-operating expenses	0	0	0	0	0	0
Pre-tax income (EBT)	-7,809	84,661	-557	-3,997	55,781	71,424
Taxes	154	-30,645	1,086	12,543	-19,523	-24,999
Minority interests	-650	-28,845	626	-1,268	-6,561	-8,340
Net income / loss	-8,305	25,171	1,155	7,277	29,697	38,086
EPS (in €)	-1.56	4.80	0.23	1.44	5.87	7.52
Ratios						
EBIT margin on revenues	-30.4%	387.9%	176.9%	11.6%	62.5%	59.8%
EBITDA margin on revenues	10.7%	499.1%	260.0%	37.0%	86.1%	85.2%
Net margin on revenues	-46.8%	110.1%	60.9%	54.1%	31.6%	30.1%
Tax rate	2.0%	36.2%	195.0%	313.8%	35.0%	35.0%
Y-Y Growth						
Revenues	473.9%	28.8%	-91.7%	608.5%	599.0%	34.7%
Operating income	n.m.	n.m.	-96.2%	-53.6%	3671.5%	28.8%
Net income/ loss	n.m.	n.m.	-95.4%	530.1%	308.1%	28.2%



All figures in € 000s	2013A	2014A	2015A	2016E	2017E	2018E
<u>Assets</u>						
Current assets, total	56,841	93,881	78,733	51,286	51,497	40,283
Cash and cash equivalents	46,063	92,821	71,041	42,510	29,837	12,858
Inventories	3,763	38	55	439	5,415	6,856
Receivables	1,319	106	2,831	1,755	6,498	8,228
Prepayments	137	190	276	439	1,083	1,371
Other current assets	5,559	726	4,530	6,144	8,664	10,970
Deferred tax assets	4,157	4,322	534	0	0	0
Non-current assets, total	70,535	36,493	48,786	88,521	152,528	190,121
Intangible assets	4,541	12,279	17,501	17,361	17,081	16,801
Land and buildings	1,856	0	0	400	600	800
Producing oil plants	32,802	0	5,314	35,029	80,600	107,389
Exploration and evaluation	20,153	1,647	1,596	10,520	24,207	32,253
Plant and machinery	2,873	513	444	2,927	6,734	8,973
Other equipment	209	94	119	784	1,805	2,405
Equity investments	3,703	11,456	11,822	12,000	12,000	12,000
Securities classified as fixed assets	4,398	10,504	11,990	9,500	9,500	9,500
Total assets	131,533	134,696	128,053	139,808	204,025	230,404
Shareholders' equity & debt						
Current liabilities, total	18,221	4,675	4,230	3,627	20,172	5,188
Bank debt	3,256	414	7	0	0	0
Bond debt	0	0	0	0	15,800	0
Accounts payable	13,928	217	957	1,088	1,312	1,556
Other current liabilities	1,037	4,044	3,266	2,539	3,060	3,632
Long-term liabilities, total	72,021	63,147	57,955	64,907	79,107	79,107
Bond debt	62,237	57,111	51,555	58,500	42,700	42,700
Bank debt	5,993	5,993	6,400	6,407	36,407	36,407
Other long term liabilities	3,791	43	0	0	0	0
Provisions	1,993	1,540	1,089	2,000	2,000	2,000
Minority interests	9,723	2,331	2,566	3,834	10,395	18,736
Shareholders' equity	29,171	60,157	59,274	63,439	89,351	122,373
Consolidated equity	38,894	62,488	61,840	67,273	99,746	141,109
Deferred tax liabilities	404	2,846	2,939	2,000	3,000	3,000
Total consolidated equity and debt	131,533	134,696	128,053	139,808	204,025	230,404
Ratios						
Current ratio (x)	3.12	20.08	18.61	14.14	2.55	7.76
Quick ratio (x)	2.91	20.07	18.60	14.02	2.28	6.44
Financial leverage	54.1%	-63.7%	-40.5%	19.2%	55.7%	40.2%
Book value per share (€)	5.48	11.94	11.77	12.59	17.74	24.29
Net cash (debt)	-21,025	39,807	25,069	-12,897	-55,570	-56,749
Return on equity (ROE)	-17.4%	106.6%	0.9%	13.2%	43.4%	38.6%



CASH FLOW STATEMENT

All figures in € 000s	2013A	2014A	2015A	2016E	2017E	2018E
EBIT	-5,395	88,726	3,355	1,558	58,758	75,653
Depreciation and amortisation	7,302	25,434	1,578	3,417	22,112	32,157
EBITDA	1,907	114,160	4,933	4,975	80,871	107,810
Changes in working capital	-2,546	1,524	-4,625	-1,681	-12,138	-4,950
Interest paid	-35	-4,263	-3,912	-5,555	-2,977	-4,228
Tax	154	-29,091	1,086	12,543	-19,523	-24,999
Profit/loss from sale of Tekton Energy	0	-103,605	0	0	0	0
Other adjustments	-1,248	2,299	3,712	0	0	0
Operating cash flow	-1,768	-18,976	1,194	10,283	46,231	73,634
Investing cash flow	-33,304	101,073	-13,307	-45,465	-86,119	-69,750
Free cash flow	-35,072	82,097	-12,113	-35,182	-39,888	3,884
Dividends, share buybacks	-2,661	-38,929	-3,100	-2,785	-2,785	-5,063
Equity financing	4,558	0	0	0	0	0
Debt financing	67,600	0	0	6,945	30,000	0
Debt repayment	-2,749	-8,540	-6,182	0	0	-15,800
Other	2,128	999	-2,712	2,490	0	0
Financing cash flow	68,876	-46,470	-11,994	6,650	27,215	-20,863
Change in cash and equivalents	33,804	35,627	-24,107	-28,531	-12,673	-16,979
Other	0	11,131	2,327	0	0	0
Cash and cash equivalents, start of the year	12,259	46,063	92,821	71,041	42,510	29,837
Cash and cash equivalents, end of the year	46,063	92,821	71,041	42,510	29,837	12,858
EBITDA/share (in €)	0.36	21.70	0.97	0.98	15.98	21.31
Y-Y Growth						
Operating cash flow	n.m.	n.m.	n.m.	761.2%	349.6%	59.3%
Free cash flow	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.
EBITDA/share	-19.4%	5954.7%	-95.5%	0.9%	1525.4%	33.3%



FIRST BERLIN RECOMMENDATION & PRICE TARGET HISTORY

Report No.:	Date of publication	Previous day closing price	Recommendation	Price target
Initial Report	22 July 2010	€7.45	Buy	€13.20
221	\downarrow	1	\downarrow	1
22	9 June 2015	€17.94	Buy	€25.00
23	16 November 2015	€17.01	Buy	€23.00
24	8 July 2016	€15.72	Buy	€24.00
25	Today	€21.40	Buy	€27.00

Authored by: Simon Scholes, Analyst

Company responsible for preparation:

First Berlin Equity Research GmbH Mohrenstraße 34 10117 Berlin

Tel. +49 (0)30 - 80 93 96 94 Fax +49 (0)30 - 80 93 96 87

info@firstberlin.com www.firstberlin.com

Person responsible for forwarding or distributing this financial analysis: Martin Bailey

Copyright© 2016 First Berlin Equity Research GmbH No part of this financial analysis may be copied, photocopied, duplicated or distributed in any form or media whatsoever without prior written permission from First Berlin Equity Research GmbH. First Berlin Equity Research GmbH shall be identified as the source in the case of quotations. Further information is available on request.

INFORMATION PURSUANT TO SECTION 34B OF THE GERMAN SECURITIES TRADING ACT [WPHG], TO REGULATION (EU) NO 596/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF APRIL 16, 2014, ON MARKET ABUSE (MARKET ABUSE REGULATION) AND TO THE GERMAN ORDINANCE ON THE ANALYSIS OF FINANCIAL INSTRUMENTS [FINANV]

First Berlin Equity Research GmbH (hereinafter referred to as: "First Berlin") prepares financial analyses while taking the relevant regulatory provisions, in particular the German Securities Trading Act [WpHG], Regulation (EU) No 596/2014 of the European Parliament and of the Council of April 16, 2014, on market abuse (market abuse regulation) and the German Ordinance on the Analysis of Financial Instruments [FinAnV] into consideration. In the following First Berlin provides investors with information about the statutory provisions that are to be observed in the preparation of financial analyses.

CONFLICTS OF INTEREST

In accordance with Section 34b Paragraph 1 of the German Securities Trading Act [WpHG] and Regulation (EU) No 596/2014 of the European Parliament and of the Council of April 16, 2014, on market abuse (market abuse regulation) financial analyses may only be passed on or publicly distributed if circumstances or relations which may cause conflicts of interest among the authors, the legal entities responsible for such preparation or companies associated with them are disclosed along with the financial analysis.

First Berlin offers a range of services that go beyond the preparation of financial analyses. Although First Berlin strives to avoid conflicts of interest wherever possible, First Berlin may maintain the following relations with the analysed company, which in particular may constitute a potential conflict of interest (further information and data may be provided on request):

- The author, First Berlin, or a company associated with First Berlin holds an interest of more than five percent in the share capital of the analysed company;
- The author, First Berlin, or a company associated with First Berlin provided investment banking or consulting services for the analysed company within the past twelve months for which remuneration was or was to be paid;
- The author, First Berlin, or a company associated with First Berlin reached an agreement with the analysed company
 for preparation of a financial analysis for which remuneration is owed;
- The author, First Berlin, or a company associated with First Berlin has other significant financial interests in the analysed company;

In order to avoid and, if necessary, manage possible conflicts of interest both the author of the financial analysis and First Berlin shall be obliged to neither hold nor in any way trade the securities of the company analyzed. The remuneration of the author of the financial analysis stands in no direct or indirect connection with the recommendations or opinions represented in the financial analysis. Furthermore, the remuneration of the author of the financial analysis is neither coupled directly to financial transactions nor to stock exchange trading volume or asset management fees.

If despite these measures one or more of the aforementioned conflicts of interest cannot be avoided on the part of the author or First Berlin, then reference shall be made to such conflict of interest.

PRICE TARGET DATES

Unless otherwise indicated, current prices refer to the closing prices of the previous trading day.

AGREEMENT WITH THE ANALYSED COMPANY AND MAINTENANCE OF OBJECTIVITY

The present financial analysis is based on the author's own knowledge and research. The author prepared this study without any direct or indirect influence exerted on the part of the analysed company. Parts of the financial analysis were possibly provided to the analysed company prior to publication in order to avoid inaccuracies in the representation of facts. However, no substantial changes were made at the request of the analysed company following any such provision.



ASSET VALUATION SYSTEM

First Berlin's system for asset valuation is divided into an asset recommendation and a risk assessment.

ASSET RECOMMENDATION

The recommendations determined in accordance with the share price trend anticipated by First Berlin in the respectively indicated investment period are as follows:

STRONG BUY: An expected favourable price trend of more than 50% combined with sizeable confidence in the quality and forecast security of management.

BUY: An expected favourable price trend of more than 25% percent.

ADD: An expected favourable price trend of between 0% and 25%.

REDUCE: An expected negative price trend of between 0% and -15%.

SELL: An expected negative price trend of more than -15%.

RISK ASSESSMENT

The First Berlin categories for risk assessment are low, average, high and speculative. They are determined by ten factors: Corporate governance, quality of earnings, management strength, balance sheet and financial risk, competitive position, standard of financial disclosure, regulatory and political uncertainty, strength of brandname, market capitalisation and free float. These risk factors are incorporated into the First Berlin valuation models and are thus included in the target prices. First Berlin customers may request the models.

INVESTMENT HORIZON

Unless otherwise stated in the financial analysis, the ratings refer to an investment period of twelve months.

UPDATES

At the time of publication of this financial analysis it is not certain whether, when and on what occasion an update will be provided. In general First Berlin strives to review the financial analysis for its topicality and, if required, to update it in a very timely manner in connection with the reporting obligations of the analysed company or on the occasion of ad hoc notifications.

SUBJECT TO CHANGE

The opinions contained in the financial analysis reflect the assessment of the author on the day of publication of the financial analysis. The author of the financial analysis reserves the right to change such opinion without prior notification.

Legally required information regarding

- key sources of information in the preparation of this research report
- valuation methods and principles
- sensitivity of valuation parameters

can be accessed through the following internet link: http://firstberlin.com/disclaimer-english-link/

SUPERVISORY AUTHORITY: Bundesanstalt für Finanzdienstleistungsaufsicht (German Federal Financial Supervisory Authority) [BaFin], Graurheindorferstraße 108, 53117 Bonn and Lurgiallee 12, 60439 Frankfurt

EXCLUSION OF LIABILITY (DISCLAIMER)

RELIABILITY OF INFORMATION AND SOURCES OF INFORMATION

The information contained in this study is based on sources considered by the author to be reliable. Comprehensive verification of the accuracy and completeness of information and the reliability of sources of information has neither been carried out by the author nor by First Berlin. As a result no warranty of any kind whatsoever shall be assumed for the accuracy and completeness of information and the reliability of sources of information, and neither the author nor First Berlin, nor the person responsible for passing on or distributing the financial analysis shall be liable for any direct or indirect damage incurred through reliance on the accuracy and completeness of information and the reliability of sources of information.

RELIABILITY OF ESTIMATES AND FORECASTS

The author of the financial analysis made estimates and forecasts to the best of the author's knowledge. These estimates and forecasts reflect the author's personal opinion and judgement. The premises for estimates and forecasts as well as the author's perspective on such premises are subject to constant change. Expectations with regard to the future performance of a financial instrument are the result of a measurement at a single point in time and may change at any time. The result of a financial analysis always describes only one possible future development – the one that is most probable from the perspective of the author – of a number of possible future developments.

Any and all market values or target prices indicated for the company analysed in this financial analysis may not be achieved due to various risk factors, including but not limited to market volatility, sector volatility, the actions of the analysed company, economic climate, failure to achieve earnings and/or sales forecasts, unavailability of complete and precise information and/or a subsequently occurring event which affects the underlying assumptions of the author and/or other sources on which the author relies in this document. Past performance is not an indicator of future results; past values cannot be carried over into the future.

Consequently, no warranty of any kind whatsoever shall be assumed for the accuracy of estimates and forecasts, and neither the author nor First Berlin, nor the person responsible for passing on or distributing the financial analysis shall be liable for any direct or indirect damage incurred through reliance on the correctness of estimates and forecasts.

INFORMATION PURPOSES, NO RECOMMENDATION, SOLICITATION, NO OFFER FOR THE PURCHASE OF SECURITIES

The present financial analysis serves information purposes. It is intended to support institutional investors in making their own investment decisions; however in no way provide the investor with investment advice. Neither the author, nor First Berlin, nor the person responsible for passing on or distributing the financial analysis shall be considered to be acting as an investment advisor or portfolio manager vis-à-vis an investor. Each investor must form his own independent opinion with regard to the suitability of an investment in view of his own investment objectives, experience, tax situation, financial position and other circumstances.

The financial analysis does not represent a recommendation or solicitation and is not an offer for the purchase of the security specified in this financial analysis. Consequently, neither the author nor First Berlin, nor the person responsible for passing on or distributing the financial analysis shall as a result be liable for losses incurred through direct or indirect employment or use of any kind whatsoever of information or statements arising out of this financial analysis.

A decision concerning an investment in securities should take place on the basis of independent investment analyses and procedures as well as other studies including, but not limited to, information memoranda, sales or issuing prospectuses and not on the basis of this document.



NO ESTABLISHMENT OF CONTRACTUAL OBLIGATIONS

By taking note of this financial analysis the recipient neither becomes a customer of First Berlin, nor does First Berlin incur any contractual, quasi-contractual or pre-contractual obligations and/or responsibilities toward the recipient. In particular no information contract shall be established between First Berlin and the recipient of this information.

NO OBLIGATION TO UPDATE

First Berlin, the author and/or the person responsible for passing on or distributing the financial analysis shall not be obliged to update the financial analysis. Investors must keep themselves informed about the current course of business and any changes in the current course of business of the analysed company.

DUPLICATION

Dispatch or duplication of this document is not permitted without the prior written consent of First Berlin.

SEVERABILITY

Should any provision of this disclaimer prove to be illegal, invalid or unenforceable under the respectively applicable law, then such provision shall be treated as if it were not an integral component of this disclaimer; in no way shall it affect the legality, validity or enforceability of the remaining provisions.

APPLICABLE LAW, PLACE OF JURISDICTION

The preparation of this financial analysis shall be subject to the law obtaining in the Federal Republic of Germany. The place of jurisdiction for any disputes shall be Berlin (Germany).

NOTICE OF DISCLAIMER

By taking note of this financial analysis the recipient confirms the binding nature of the above explanations.

By using this document or relying on it in any manner whatsoever the recipient accepts the above restrictions as binding for the recipient.

QUALIFIED INSTITUTIONAL INVESTORS

First Berlin financial analyses are intended exclusively for qualified institutional investors.

This report is not intended for distribution in the USA, Canada and/or the United Kingdom (Great Britain).